NONPROVISIONAL APPLICATION FOR LETTERS PATENT UNITED STATES OF AMERICA

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10	Be it known that I, JAMES CONERTON, residing at 355 Wynland Trace, Atlanta, GA 30350, a citizen of the United States, have invented certain new and useful improvements in an
15	APPARATUS AND METHOD FOR SUPPORTING AN ELECTRONIC VISUAL DISPLAY
20	of which the following is a specification.
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APPARATUS AND METHOD FOR SUPPORTING AN ELECTRONIC VISUAL DISPLAY

5 TECHNICAL FIELD

The present invention relates generally to furniture, and more specifically to an apparatus for supporting television monitors, plasma screens, computer monitors, motorized projection screens and/or other electronic visual displays, wherein the apparatus comprises apertures and channels for managing and concealing electrical cables and wires.

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BACKGROUND OF THE INVENTION

With recent innovations and advancements in technology, electronic visual displays, such as televisions and computer monitors, are becoming increasingly thinner and more affordable. Because such ultra-thin visual displays have become more prevalent, the need for furniture

specifically adapted to support such displays has grown accordingly. Unfortunately, conventional entertainment units are generally unsuitable to support such thin screen media, as the sheer depth and size of such entertainment units are typically more suited for accommodating conventional tube televisions and the like.

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Additionally, because flat screen monitors usually possess a height much greater than their base, such 10 monitors are typically unstable and, as such, are susceptible to tipping over. Although, pedestals specifically designed to support flat screen monitors are available, as are support brackets for wall-mounting flat screen televisions, such support devices have not been 15 incorporated into existing furniture pieces to facilitate accommodation of flat screen displays therewithin.

Furthermore, current support mechanisms do not provide a sufficient means for managing and/or concealing the numerous electrical cables and wires needed to power and support the audiovisual display. Unfortunately, the integration of audiovisual accessories significantly exacerbates the problem. For example, to wall mount a flat

screen, holes must typically be drilled into the wall to conceal power, cable, DVD, VCR, stereo, camera and/or video game console wires and cables. Moreover, several such holes may be necessary to receive wiring and cabling from additional electronic devices.

Therefore, it is readily apparent that there is a need for an apparatus for supporting an electronic visual display, and for managing and concealing the numerous cables and wires associated therewith. Furthermore, there is a need for such an apparatus that enables easy installation and integration of electronic accessories and their associated wire connections.

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BRIEF SUMMARY OF THE INVENTION

Briefly described, in a preferred embodiment, the present invention overcomes the above-mentioned disadvantages and meets the recognized need for such a device by providing an apparatus for supporting electronic visual displays, wherein the apparatus comprises a

plurality of apertures and channels for managing and concealing electrical cables and wires.

According to its major aspects and broadly stated, the

5 present invention in its preferred form is an apparatus for
supporting television monitors, plasma screens, computer
monitors, motorized projection screens and/or other
electronic visual displays, wherein an A/V connector plate
is provided to integrate auxiliary electronic devices, and

10 wherein apertures and channels are provided to manage and
conceal the cables and wires needed to support the
electronic visual display.

More specifically, the apparatus possesses a first 15 aperture to permit cables and wires to traverse therethrough, wherein a plurality of smaller apertures are formed around the first aperture for receiving mounting screws therein, and wherein the electronic visual display is mounted over the first aperture. A horizontally 20 elongated recess is situated on a lower rear portion of the apparatus, wherein a power outlet and audiovisual source, namely a television antenna, satellite dish or cable outlet, are located proximal to the recess when

apparatus is secured to a wall surface. The apparatus also possesses an A/V connector plate for connecting auxiliary electronic devices to the electronic visual display, power source, and/or audiovisual source.

A first channel is disposed on the apparatus to connect the recess to the first aperture, thereby permitting wires and cables to connect the electronic visual display to the power source and/or audiovisual source disposed on the wall surface. A second channel is disposed on the apparatus to connect the recess to the A/V connector plate, thereby permitting wires and cables to connect selected auxiliary electronic devices to the electronic visual display, power source, and/or audiovisual source disposed on the wall surface.

Accordingly, a feature and advantage of the present invention is its ability to mount and display an electronic visual display, yet effectively manage and conceal the cables and wires needed to power and support the electronic visual display.

Another feature and advantage of the present invention is its ease of assembly.

Another feature and advantage of the present invention is its ability to permit the integration of auxiliary electronic devices, such as VCRs, DVD players, stereos, cameras, and/or video game consoles, yet effectively manage and conceal associated cables and wires.

These and other features and advantages of the present invention will become more apparent to one skilled in the art from the following description and claims when read in light of the accompanying drawings.

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BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will be better understood by reading the Detailed Description of the Preferred and Selected Alternate Embodiments with reference to the accompanying drawing figures, in which like reference numerals denote similar structure and refer to like elements throughout, and in which:

- FIG. 1 is a front perspective view of a preferred
 embodiment of the present invention;
- 5 **FIG. 2** is a side view of a preferred embodiment of the present invention; and
- FIG. 3 is a rear perspective view of a preferred embodiment of the present invention, wherein the rear panel is disengaged from the apparatus.

DETAILED DESCRIPTION OF THE PREFERRED AND SELECTED ALTERNATIVE EMBODIMENTS

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In describing the preferred and selected alternate embodiments of the present invention, as illustrated in FIGS. 1-3, specific terminology is employed for the sake of clarity. The invention, however, is not intended to be limited to the specific terminology so selected, and it is to be understood that each specific element includes all

technical equivalents that operate in a similar manner to accomplish similar functions.

Referring now to FIGS. 1-3, the present invention in a preferred embodiment is an apparatus 10 for displaying a 5 television monitor \mathbf{M} on a wall surface \mathbf{W} ; however, it is contemplated in an alternative embodiment that apparatus 10 could be utilized to display other electronic devices and equipment, such as, for exemplary purposes only, plasma screens, computer monitors, motorized projection screens, 10 and/or audio speakers. It is also contemplated that apparatus could be utilized to display a television monitor M on adjacent wall surfaces, on a ceiling surface or on adjacent ceiling and wall surfaces. Apparatus 10 generally preferably comprises front panel 20, middle portion 50 and 15 panel **150**. More specifically, front panel 20 rear preferably comprises front side 21, rear side 23, top edge 22, bottom edge 24, left edge 26 and right edge 28, wherein front panel 20 is preferably in the form of a rectangular wooden board with a veneer or laminate finish. 20 recognized that front panel 20 could alternatively embody other suitable shapes and could be formed from other suitable materials, such as, for exemplary purposes only,

particle board, tin, aluminum, plastic, or other strong, rigid, yet relatively lightweight materials.

Preferably formed on upper portion 25 of front panel 20 is aperture 30, wherein aperture 30 is preferably 5 centrally positioned between left edge 26 and right edge 28. Preferably, aperture 30 is rectangular-shaped and comprises corners 32, 34, 36 and 38, wherein circularshaped apertures 40, 42, 44 and 46 are disposed proximal to corners 32, 34, 36 and 38, respectively, for receiving 10 mounting screws therein, as more fully described below. is recognized that apertures 30, 40, 42, 44 and 46 could alternatively embody other suitable shapes and could be situated anywhere on front panel 20, so long as a mounting bracket may be mounted over aperture 30 for purposes more 15 fully described below.

Preferably, middle portion 50 of apparatus 10 is in the form of a rectangular board comprising front side 52, 20 rear side 54, top edge 56, bottom edge 58, left edge 60 and right edge 62. Preferably, the width of top and bottom edges 56 and 58, respectively, of middle portion 50 are approximately equal to the width of top and bottom edges 22

and 24, respectively, of front panel 20; the length of left and right edges 60 and 62, respectively, of middle portion 50 are approximately five inches shorter than the length of left and right edges 26 and 28, respectively, of front panel 20; and the thickness of middle portion 50 is approximately three times the thickness of front panel 20. Middle portion 50 is preferably formed from recycled cardboard; however, it is contemplated that middle portion 50 could alternatively be formed from other suitable materials, such as, for exemplary purposes only wood, particle board, cork, expanded polystyrene, or other relatively strong, lightweight materials.

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Referring now to FIG. 3, preferably formed on upper middle region 51 of middle portion 50 are apertures 61, 63, 64, 66 and 68, wherein apertures 61, 63, 64, 66 and 68 are substantially identical to apertures 30, 40, 42, 44 and 46, formed on front panel 20, and wherein apertures 61, 63, 64, 66 and 68 are substantially aligned with apertures 30, 40, 42, 44 and 46 when top edge 22 of front panel 20 is aligned with top edge 56 of middle portion 50, as more fully described below.

Preferably disposed on lower portion 53 of rear side 54 of middle portion 50 is substantially rectangular-shaped recess 70. Preferably, recess 70 is centrally positioned between left edge 60 and right edge 62 of middle portion 50, and situated approximately 5 inches from bottom edge 58. It is recognized that recess 70 could alternatively embody other suitable shapes and/or sizes, and that any number of recesses 70 could be situated in any suitable configuration on apparatus 10, so long as recess 70 accommodates for electrical outlets and plugs to pass through and permit apparatus 10 to stand flush against wall surface W, as more fully described below. Preferably, recess 70 is horizontally elongated to increase the lateral area in which apparatus 10 may be positioned on wall surface W to accommodate for outlets and plugs.

Preferably, channel 80 is disposed on rear side 54 of middle portion 50, wherein channel 80 is centrally positioned between left edge 60 and right edge 62 of middle portion 50, and wherein channel 80 extends from aperture 61 to recess 70. It is recognized that channel 80 could be alternatively situated at any suitable position on apparatus 10, so long as cables, wires and/or other similar

electrical conductors can extend from aperture **61**, through channel **80**, and into recess **70**, as more fully described below.

Preferably, horizontal channel 90 is disposed on lower portion 53 of rear side 54 of middle portion 50, wherein channel 90 extends from left edge 60 to right edge 62. It is recognized in an alternate embodiment that channel 90 could be situated at any suitable position on apparatus 10, so long as cables and wires can extend from channel 90 to aperture 61, as more fully described below.

Preferably disposed on rear side 54 of middle portion 50 are vertical slits 100 and 102. Preferably, slits 100 and 102 are disposed through channel 90, wherein slit 100 is disposed proximate to left edge 60 of middle portion 50, and wherein slit 102 is disposed proximate to right edge 62 of middle portion 50. Slits 100 and 102 are preferably configured to receive and retain blank plate 110 and A/V connector plate 120 via frictional fit, wherein slit 100 preferably possesses blank plate 110, and wherein slit 102 preferably possesses A/V connector plate 120. It is recognized that slit 100 could possess blank plate 110 or

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A/V connector plate 120, and slit 102 could possess blank plate 110 or A/V connector plate 120. Moreover, it is recognized that although blank plate 110 and A/V connector plate 120 are preferably removably secured to middle portion 50, blank plate 110 and A/V connector plate 120 could be permanently affixed to middle portion 50.

Preferably, blank plate 110 is provided to cover and seal channel 90, wherein blank plate 110 is in the form of a rectangular-shaped piece of wood. It is recognized, however, that blank plate 110 could alternatively embody other suitable shapes and/or sizes, and could be formed from other suitable materials, such as, for exemplary purposes only particle board, cardboard, aluminum, tin, or plastic.

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A/V connector plate 120 is preferably a thin rectangular plate possessing a plurality of A/V connection ports, as is known within the art, for connecting auxiliary electronic devices to television monitor M, as more fully described below. It is recognized that A/V connector plate 120 could also possess supplemental power outlets and/or a cable outlet to connect auxiliary electronic devices to a

power source and/or an audiovisual source, as more fully described below. It is further contemplated that apparatus 10 could possess any number and configuration of A/V connection ports, cable outlets and/or supplemental power outlets. Although apparatus 10 preferably comprises A/V connector plate 120 disposed on a lower outer portion of apparatus 10, it is contemplated in an alternate embodiment that apparatus 10 could possess any number of A/V connector plates 120 situated in any suitable configuration on apparatus 10.

Preferably, channel 130 is disposed on rear side 54 of middle portion 50, wherein channel 130 is centrally positioned between left edge 60 and right edge 62 of middle portion 50, and wherein channel 130 extends from channel 90 to recess 70. It is contemplated in an alternate embodiment that channel 130 could be situated at any suitable position on apparatus 10, so long as cables and wires can extend from channel 90 to recess 70, as more fully described below. Furthermore, although apparatus 10 preferably comprises channels 80, 90, and 130, it is contemplated in an alternate embodiment that apparatus 10 could comprise any number of channels, situated in any

suitable configuration within apparatus 10, so long as wires and/or cables are able to traverse channels connecting recess 70 to aperture 61 and/or A/V connector plate 120, and so long as wires and/or cables are able to traverse channels connecting aperture 61 to A/V connector plate 120.

Preferably, rear side 54 of middle portion 50 further possesses threaded screw holes 140, 142, 144 and 146 for attaching middle portion 50 to rear panel 150, as more fully described below. Preferably, screw hole 140 is disposed on upper left portion 71 of rear side 54, screw hole 142 is disposed on upper right portion 73 of rear side 54, screw hole 144 is disposed on bottom left portion 75 of rear side 54, and screw hole 146 is disposed on lower right portion 77 of rear side 54. It is recognized that middle portion 50 could comprise any number of screw holes, situated in any suitable configuration on rear side 54, so long as rear panel 150 can be removably secured to middle portion 50, as more fully described below.

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Preferably, rear panel 150 is in the form of a rectangular board comprising front side 152, rear side 154,

top edge 156, bottom edge 158, left edge 160 and right edge Preferably, rear panel 150 is preferably substantially identical to front panel 20, wherein the width of top and bottom edges 156 and 158 of rear panel 150 are approximately equal to the width of top and bottom edges 22 and 24 of front panel 20; however, the length of left and right edges 160 and 162 of rear panel 150 are preferably approximately five inches shorter length of left and right edges 26 and 28 of front panel 20. It is recognized that rear panel 150 could alternatively embody other suitable shapes and/or sizes, and that rear panel 150 could be formed from other suitable materials, such as, for exemplary purposes only, particle board, tin, aluminum, plastic, or other strong, rigid, yet relatively lightweight materials.

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Preferably formed on upper middle portion 151 of rear panel 150 are apertures 170, 172, 174, 176 and 178, wherein apertures 170, 172, 174, 176 and 178 are substantially identical to apertures 30, 40, 42, 44 and 46, respectively, formed on front panel 20. Preferably, when top edge 156 of rear panel 150 is aligned with top edge 22 of front panel 20 and top edge 56 of middle portion 50, as more fully

described below, apertures 170, 172, 174, 176 and 178, formed on rear panel 150, align with apertures 30, 40, 42, 44 and 46, respectively, formed on front panel 20, and apertures 61, 63, 64, 66 and 68, respectively, formed on middle portion 50, to form throughholes 180, 184, 186, 188 and 190, respectively, for purposes more fully described Preferably, throughholes 180, 184, 186, 188 and below. 190, and associated apertures formed on front panel 20, middle portion 50 and rear panel 150, are positioned at selected distances from one another depending on location of the mounting screw apertures disposed on the selected associated mounting plate, as more fully described It is contemplated in an alternate embodiment that apparatus 10 could possess any number of apertures and throughholes, situated in any suitable configuration on apparatus 10, so long as apparatus 10 can be mounted to wall surface W and so long as wires and cables can be passed through and out of apparatus 10.

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20 Aperture 200 is preferably centrally disposed on lower portion 153 of rear panel 150, wherein aperture 200 is preferably dimensioned and positioned to engage recess 20 when top edge 156 of rear panel 150 is aligned with top

edge **56** of middle portion **50**, as more fully described below. Aperture **200**, in combination with recess **20**, preferably accommodates for electrical outlets and plugs to pass therethrough and permit apparatus **10** to stand flush against wall surface **W**.

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Preferably, rear panel 150 further possesses apertures 210, 212, 214 and 216 for attaching rear panel 150 to middle portion 50, as more fully described below, wherein apertures 210, 212, 214 and 216 are dimensioned and positioned to engage screw holes 140, 142, 144 and 146, formed on middle portion 50, when top edge 156 of rear panel 150 is aligned with top edge 56 of middle portion 50, as more fully described below. It is recognized that rear panel 150 could comprise any number of apertures, situated in any suitable configuration on rear panel 150, so long as rear panel 150 can be removably secured to middle portion 50, as more fully described below.

20 Front panel 20 is preferably permanently attached to middle portion 50, wherein top edge 22 of front panel 20 is preferably aligned with top edge 56 of middle portion 50.

Rear side 23 of front panel 20 is preferably glued to front

side **52** of middle portion **50**; although it is recognized that other suitable fasteners could alternatively be utilized, such as, for exemplary purposes only, screws, rivets, bolts, nails, rubber cement, or other suitable adhesives.

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After the appropriate wires and cables are set into place, as more fully described below, rear panel 150 is preferably removably secured to middle portion 50, wherein top edge 156 of rear panel 150 is preferably aligned with top edge 56 of middle portion 50. Preferably, screws are inserted into apertures 210, 212, 214 and 216, formed on rear panel 150, to removably secure front side 152 of rear panel 150 to rear side 54 of middle portion 50; however, it is recognized that other suitable fasteners could be utilized, such as, for exemplary purposes only, a tab and slot engagement.

Referring back to **FIG. 2**, and with continued reference to **FIG. 3**, notch **220** is preferably disposed on lower rear portion **11** of apparatus **10**, wherein notch **220** preferably accommodates for base trim and or floor molding on wall

surface **W**, if present, to permit apparatus **10** to stand flush against a wall surface.

Now referring back to FIG. 1, with continued reference 5 to FIG. 3, after the appropriate wires and cables are set into place, as more fully described below, a flat screen television monitor or plasma screen mounting plate P is preferably affixed to front panel 20 of apparatus 10 via insertion of mounting screws S through mounting plate P and into throughholes 184, 186, 188 and 190, wherein mounting 10 screws S preferably extend passed apertures 170, 172, 174, 176 and 178, formed on rear panel 150, and into wall surface W, thereby anchoring and removably securing apparatus 10 to wall surface W. Preferably, mounting plate 15 P is a conventional attachment plate for mounting a flat screen television monitor or plasma screen to a wall surface, as is known within the art. Mounting plate P is typically included with the purchase of a flat screen television monitor or plasma screen. Subsequently, 20 television monitor \mathbf{M} is preferably removably secured to mounting plate P. It is contemplated in an alternative embodiment that other suitable fasteners for mounting television monitor \mathbf{M} to apparatus $\mathbf{10}$ and for affixing apparatus ${f 10}$ to wall surface ${f W}$ could be utilized, such as, for exemplary purposes only, brackets, nails, bolts, rivets, dowels, and the like.

5 To operate apparatus 10, first wire set C1 is preferably utilized to connect television monitor ${\bf M}$ to a power and/or audiovisual source, second wire set C2 is preferably utilized to connect television monitor M to A/V connector plate 120, and third wire set C3 is preferably utilized to connect A/V connector plate 120 to the power 10 and/or audiovisual source. Prior to attaching rear panel 150 to middle portion 50, and prior to mounting apparatus 10 to wall surface W, first wire set C1, second wire set C2 third wire set C3 are preferably appropriately and positioned within apparatus 10, as more fully described 15 below.

Preferably, to connect television monitor **M** to a power and/or audiovisual source, first wire set **C1** is inserted into throughhole **180**, wherein first wire set **C1** is subsequently passed through channel **80** and into recess **70**. Television monitor **M** is preferably mounted proximal to throughhole **180**. Preferably, a power outlet and

audiovisual source, preferably an antenna, satellite dish or cable outlet, are located proximal to recess 70 when apparatus 10 is secured to wall surface W.

Preferably, to connect television monitor M to A/V connector plate 120, second wire set C2 is inserted into throughhole 180, wherein second wire set C2 is subsequently passed through channel 80, recess 70, channel 130 and into channel 90. Preferably, to connect A/V connector plate 120 to the power and/or audiovisual source disposed on wall surface W, third wire set C3 is inserted into recess 70, wherein third wire set C3 is subsequently passed through channel 130 and into channel 90.

It is contemplated that any number and configuration of cables and/or wires could be utilized to connect and integrate the various electronic devices, or that apparatus 10 could possess built-in cables and wires to connect the various electronic devices. Preferably, rear panel 150 is removably secured to middle portion 50 to enclose the wires and cables, wherein screws are inserted into throughholes 210, 212, 214 and 216 formed on rear panel 150.

In an alternate embodiment, apparatus 10 could lack rear panel 150.

In another alternate embodiment, apparatus 10 could embody a unitary structure possessing apertures and channels for managing and concealing cables and wires therein.

In yet another alternate embodiment, apparatus 10 could embody other suitable shapes, such as, for exemplary purposes only, pyramidal, diamond, elliptical or semicircle.

In yet still another alternate embodiment, apparatus

15 10 possesses a decorative trim, wherein the decorative trim
is disposed on a top wall, a left sidewall and a right
sidewall of apparatus 10.

In yet still another further alternate embodiment,

20 apparatus 10 could be configured to display more than one
electronic visual display.

In still another alternate embodiment, apparatus 10 could possess mounting plates or apertures for audio speakers.

In still a further alternate embodiment, apparatus 10 could possess appendages such as shelves and cabinets.

In still another alternate embodiment, apparatus 10 could possess any number and configuration of channels for managing and concealing cables and wires.

In yet a further alternate embodiment, apparatus 10 could possess any number and configuration of A/V connector plates and associated channels for connecting the electronic visual display to auxiliary electronic devices.

In still a further alternate embodiment, apparatus 10 could be configured to stand or hang without the support of a wall surface.

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Having thus described exemplary embodiments of the present invention, it should be noted by those skilled in the art that the within disclosures are exemplary only, and

that various other alternatives, adaptations, and modifications may be made within the scope of the present invention. Accordingly, the present invention is not limited to the specific embodiments illustrated herein, but is limited only by the following claims.